



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D2500-1-190
Job Sheet 168895



169836

Part No: D2500-1-190

Job Qty: 100 ea

NOV 24 2017

QOB

Part Name: Ext'n -I' Beam Tube 4"



83x

Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/24/17

Job Tracking No:

Due Date: 12/19/17

Created By: Diane Baker

Type: Stock

Description:

Ship Via:

Dwg Rev H

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	100 pcs		12/19/17	0.00	0.00	Purchasing		SPR-16
110	Packaging	100 pcs		12/19/17	0.00	0.00	Packaging2		SPR-12
120	QC	100 pcs		12/19/17	0.00	0.00	QC6		PD 18-01-10
130	Packaging	100 pcs		12/19/17	0.00	0.00	Packaging3		
140	QC21-SA	100 Ea		12/19/17	0.00	0.00	QC21		18/03/20

Part Op 100 - Issue P/O: 038478 a) Extrude as per Dwg D2500 b) Material: 6061-T6 (QC-A-200/8) c) Minimum yield
Descriptions: tensile strength = 35 ksi d) Minimum ultimate tensile strength = 38 ksi e) Minimum elongation = 8% f) Order at 190" long
g) Bon L Canada Inc. tool # 897105 h) To be packed per DSK 066 i) Pull test to ASTM standard B221 required. j) Material
certification is required
110 - Ensure material certification is attached
120 - Check Pull test per Dwg D2500 for compliance page attached. Check hardness with Webster tester
130 - LOCATION : LG002

NOV 24 2017

QOB

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
100-Purchasing	D2500-1-190P	100	0	0	0

Part Specifications

Specifications could not be found.

DART
AEROSPACE
S027162

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Ext'n - 'I' Beam Tube 4"

PART NO: D2500-1-190
Revision:
Operation: Purchasing
Change No:

Mfg Date: 12/28/17
Job No: 168895

SPECIFICATION CONTROL DRAWING

D2500-1-XXX EXTRUSION & D2500-3-XXX EXTRUSION

NOTES:

1) MATERIAL: 6061-T6 ALUMINUM PER QQ-A-200/8 OR AMS-QQ-A-200/8 OR ASTM B221

MINIMUM TENSILE YIELD STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
MINIMUM ELONGATION = 8%

A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES

2) FINISH: N/A

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: IDENTIFY WITH DART B/N USING FINE POINT PERMANENT INK MARKER

7) WEIGHT: D2500-1 = 0.143 lb/in, D2500-3 = 0.066 lb/in

8) FOR D2500-1 PART NUMBER IS D2500-1-XXX WHERE XXX IS CUT LENGTH (EX. D2500-1-190 IS 190" LONG). D2500-1 EXTRUSION MANUFACTURED FROM:

- A) BON L DIE # 897105 -> PREFERRED
- B) CARADON MIDEAST DIE # PAH-28030
- C) CARADON MTL DIE # MH-18868

9) FOR D2500-3, PART NUMBER IS D2500-3-XXX WHERE XXX IS CUT LENGTH IN INCHES (EX. D2500-3-100 IS 100" LONG). D2500-3 EXTRUSION MANUFACTURED FROM:

- A) CARADON INDALEX DIE # MS-18867

RELEASED
2010-02-03
MP

REV.	DESCRIPTION	BY	DATE
H	REDRAW & REFORMAT DWG; CORRECT BON L DIE # TYPE (ZN B8-1), ADD AMS & ASTM MAT'L OPTION (ZN D8-1), TOLERANCES NOW PER CARADON DWG (SHT 2)	CP	09.07.16
G	ADD DIE NUMBERS & 'DIMS IN INCHES' NOTES	PH	07.04.17
F	CHANGE MAT. TO 6061-T6	DS	97.09.29
E	CHANGE MATERIAL TEMPER	DS	96.10.24
D	ADD MATERIAL PROPERTIES	DS	96.10.07
C	ADD D2500-3 WEB	BW	96.04.26
B	CHANGE INTERNAL WEB	DS	96.03.24
A	NEW ISSUE	DS	96.03.19
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD LAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. H
MFG. APPR.	<i>[Signature]</i>	D2500	SHEET 1 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	EXTRUSION	NTS
DATE	09.07.16	COPYRIGHT © 1996 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

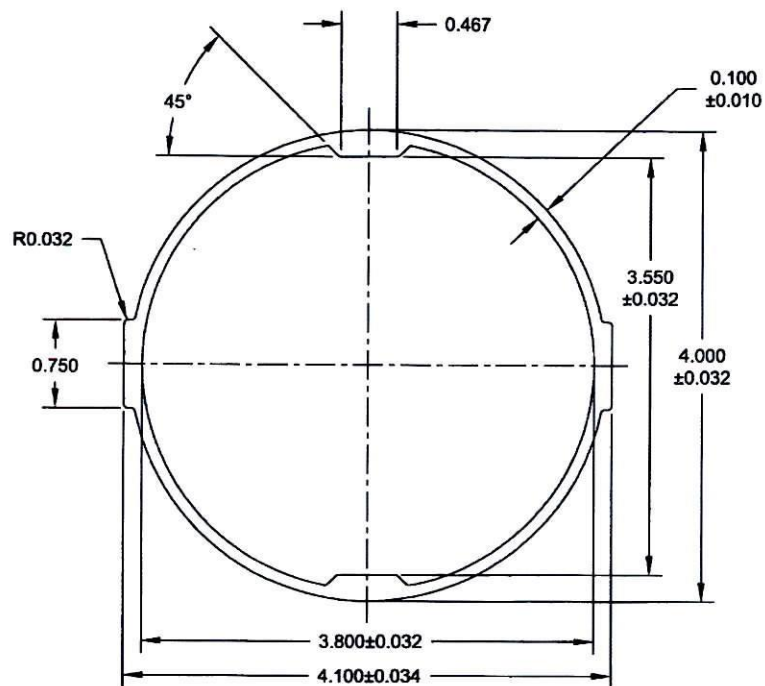
8 7 6 5 4 3 2 1

D

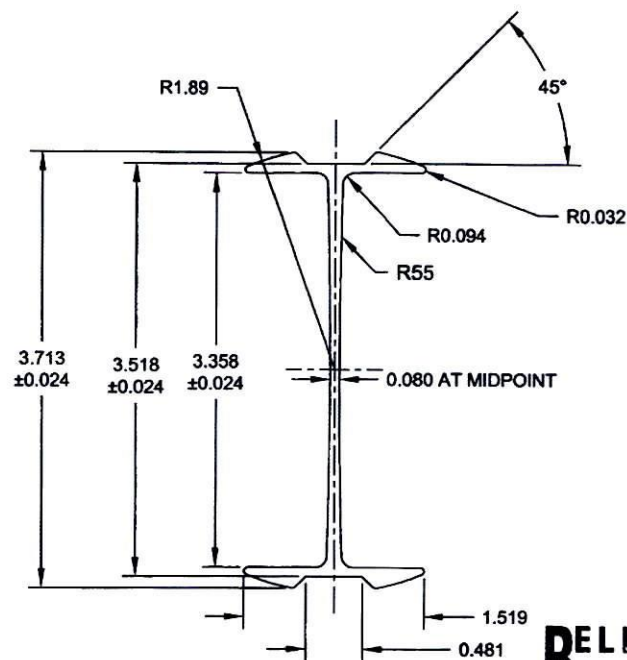
C

B

A



D2500-1



D2500-3

RELEASED
2010-02-02
MJP

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. H
MFG. APPR.		D2500 SHEET 2 OF 2
APPROVED		TITLE SCALE
DE APPR.		EXTRUSION NTS
DATE	09.07.16	

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8 7 6 5 4 3 2 1



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO038478

Supplier: SIG001-VC
Signature Aluminum Canada Inc.
C/O/ T10322C
PO Box 4488, STN A
TORONTO
ON
M5W 4H1 Canada
Phone: 905-427-6550
Fax: 905-427-2246

PO No: PO038478
PO Date: 11/24/17
Due Date: 12/18/17
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Phone:

E-MAILED
NOV 24 2017

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: COD
Freight Terms:
Special Comments:

Items											
Line Item	Part	Rev	Description	Item Tax	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	D2500-1-190P		Extrusion Round 3" 206 EXTRUDE AS PER DWG D2500 REV. H DIE #897105-2		Firmed	12/18/17	100 pcs	0 pcs	100 pcs	\$59.24/pcs	\$5,924.00
Line Item Note JOB # 168895											Grand Total: \$5,924.00

recu 83 x.

SPR 12-28

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 11/24/17 10:12 AM dart.baker.diane



1850 Clements Road, Pickering Ontario, Canada L1W 3R8
Phone: (866) 587-5780 Fax: (905) 427-2207
Visit us at www.signaturealum.com

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

PACKING LIST

ACCT# 46024

PACKING LIST DATE / DATE DU 12-19-17
PACKING LIST NUMBER / N° DE 035269
SALES ORDER NUMBER / N° DE COM 130293

SHIP TO / EXPÉDIÉ À DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200	SOLD TO / VENDUE À DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200
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TERMS / FREIGHT PP

REFER TO
THESE NUMBERS ON
ALL CORRESPONDANCE

REFEREZ-VOUS A CES
NUMEROUS POUR TOUTE
CORRESPONDANCE

CUSTOMER ID / ID DU CLIENT 46024	ORDER DATE / DE LA COM 11/28/17	CUSTOMER PO NUMBER / CLIENT PO Nombre PO038478	LOCATION PIC	TRAILER NUMBER / REMORQUE Nombre 223001	SALESMAN / VENDEUR 042	CREDIT REP / REP DU CRÉDIT	SALES REP / REP. DES VENTES R. BLAIS
BILL OF LADING NUMBER / NO. DE CONNAISSEMENT 035269			JOB / FICHIER		FIELD SALES REP / REP REGIONAL DES VENTES G.ATTENBOROU		CUST SERVICE REP / REP. SERVICE CLIENTELE SIS
			CARRIER / TRANSPORTEUR MCGILLION				

ITEM NO. / UMÉRO	ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL	UNIT / UNITÉ	PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée	MFG. PART NUMBER / MFG. PARTIE NUMÉRO	ALLOY & TEMPER / ALLIAGE & TEMPER	FINISH DESCRIPTION / DESCRIPTION DE FINITION	NBR OF PKGS / NBR DE PKGS	GROSS LBS / LIVRES BRUT	NET QUANTITY / QUANTITÉ NETTE	UNIT / UNITÉ	QUANTITY DUE / Quantité en raison
001	2,681	LB		DAA-897105-2	6061 T6		4	2,280	2,191	LB	
	1,216	KG		D2500-1-190	190.0000 IN			1,034	994	KG	
Y	100	PC			Cut(+): 0.1180 Cut(-): 0.0000	Min: -10 % Max: 10 %			83	PC	
						891559 / 401483	1	549	527		20 PC
						891559 / 401484	1	474	452		17 PC
						891559 / 401485	1	628	606		23 PC
						891559 / 401486	1	628	606		23 PC

SPA-12-28

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping packing lists and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping packing list were produced in accordance with the fair labor standards act of 1938 as amended. Orders accepted subject to the terms and conditions stated on the reverse side.

4	2,280	2,191	LB
	1,034	994	KG
		83	PC
TOTALS			

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

DATE OF DELIVERY

DRIVER



CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD
PICKERING, ON L1W 3R8

Cert Date	Cert No.	Sales Order	Page
12/03/2017	5457828	130293	1
Cust PO	B/L No	Lot	Date
PO038478	035269	891559	12/19/17

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA

Item No	Part No	Item Description	Cust Part
001	DAA-897105-2	190" Mill 6061 T6	D2500-1-190
Gross Weight	2,280 LBS		
Net Qty	2,191 LBS	83 PCS	4 PKGS
Specification	Die Desc		
AMS-QQ-A-200/8 & ASTM B221-08			

Mechanical Tests:

Tensile	Yield			
MPA / KSI	MPA / KSI	% Elongation	Conductivity	HRE
291.1 / 42.2	259.3 / 37.6	8.1	N/A	90

Chemical Analysis:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	V	Zr
0.63	0.25	0.22	0.04	0.87	0.06	0.06	0.01	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Gooder
Quality Manager
Signature Aluminum Canada Inc

ISO 9001/TS16949 Registered Company

Visit us at www.signaturealum.com

Rev A